Electronic Identification and e-Invoicing Directories

Marcus Laube

HubAlliance & eGreen Pages

Content

- Status, overview
- Private directories
- Country specific directories
- International initiatives
- Main principles and differences
- Recommended scheme for operators

Key success factors

- Interoperability is key for eInvoicing growth
- Standardization is key for interoperability:
  - data formats
  - contractual arrangements
  - compliant processes
  - e-identification
  - directories
- E-identification and directories underestimated

E-identification vs. Directories

- Necessary IDs for interoperability
  - User ID
  - Operator ID
  - Message flow ID
- Directories
  - End-User directories, public/semi-public/confidential
  - Service provider routing directories
  - Combination of the two above

The purpose of e-identification

- External routing; make it possible for the service provider to identify the customer intended to receive the e-Invoice
- Internal routing; help the customer to autmatically process the invoice by routing the invoice internally to the intended destination
- Supplier matching; comparing the e-Invoice address of the supplier to the customer's supplier register

Source: CEN

E-identification schemes

- Lack of Global/European wide, all-inclusive, free of charge and neutral company/organization register
- Some reliable international sources
  - ISO/IEC 6523-1/-2 and ISO/TC68
  - IBAN (adopted as ISO 13616:2007) is an international standard for identifying bank accounts
  - The GS1's GLN (Global Location Number), reflecting legal entities, functional entities and physical address
  - Data Universal Numbering System (D-U-N-S Number); It defines corporate firms starting from headquarters and integrating subsidiaries and foreign branches.

Source: CEN

Recommendations EC Expert Group

- Distinction between address and identifier
- eInvoicing solutions to provide an unambigous identifier
- All service providers should obtain and distribute an address
- Support invoices and related messages
- All networks to publicly make available addressing structures

Recommendations EC Expert Group

- Networks may publish accessible directories
- No end-user should be compelled to publish
- Identifiers should be re-used for other e-services
- Re-use of existing identifiers and numbering conventions
- Industry participants to cooperate in the development of standardised addressing

Inter service provider identification

- No organisation working on a European identification scheme
- Develop a scheme combining existing standards
- Use an identifier for service provider in combination with existing standards for end-users
  - 2 digit ISO country code
  - 4 digits to identify the service provider
  - 20 digits to identify the end-user
- Supported by

Overview existing directories

- Public available with details
  - Basware
    www.basware.com/our_solutions/supplier_connectivity/E-invoice_Addressbook/Pages/default.aspx
- Confidential or only partially public
  - Most other Service Providers
- Country specific directories
  - Asimelec, Spain, http://guia.efactura.asimelec.es/
  - b2bConnect, 11 nordic operators; www.b2bconnect.no
  - Tietke, Finland; http://verkkolasku.tieke.fi/

International initiatives

- Business register Interoperability projects
  - STORK, www.eid-stork.eu/
- PEPPOL
  - Pan-European Public eProcurement On-Line, www.peppol.eu
- Directories
  - eGREEN PAGES, www.huballiance.org

Recommended scheme for operators

- eGREEN PAGES - INITIATIVE

” One centralized directory containing messaging profiles and electronic addresses of ebusiness partners used for automated discovery and pairing of partners and routing of messages.

Directory is maintained by the most relevant e-service providers and utilized by ebusiness partners and the e-service providers”

Mission statement

Why ?

- international e-business connectivity address database for facilitating transfer of business messages and supplier activation

What ?

- A co-operative – non-profit directory shared between operators for supplier activation with common marketing strategy for electronic invoicing stimulation and business transaction messaging. Automated routing, discovery and pairing of business partners.

To Whom ?

- Globally to all e-business operators

How ?

- Common master directory structure and local copies managed by all involved operators
- Supplier matching features with automated operator interfaces and www based search

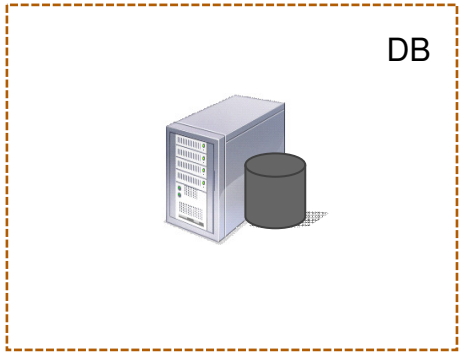
Operator benefits

- Access to global expanding address book for connecting the global supplies to buyers
- Expands the operator reachable customer base
- Faster launch of a global eInvoicing service with other participating operators
- Enables automated supplier matching against eGreen Pages DB
- Easier eInvoice address translations
- Ready contractual framework for address sharing
- Reduces the operator workload on connecting to new operators
- Improves the business information quality – enabling the automated address update interface
- Increases the competitiveness of the joined operators

Centralized Address Database

- Company name, ID
- Contact person
- Message flows:

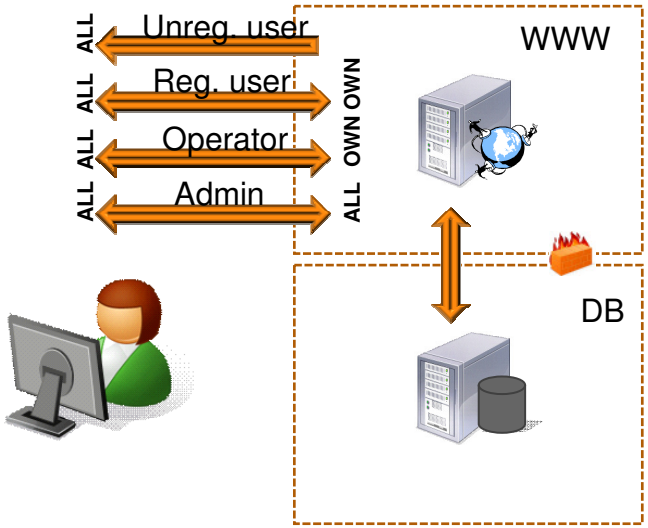
  incoming invoices, purchase orders etc.
- Message flow specific information: Message flow ID (address), operator, operator ID, contact person, messaging profile (additional information and instructions)



CENTRALIZED

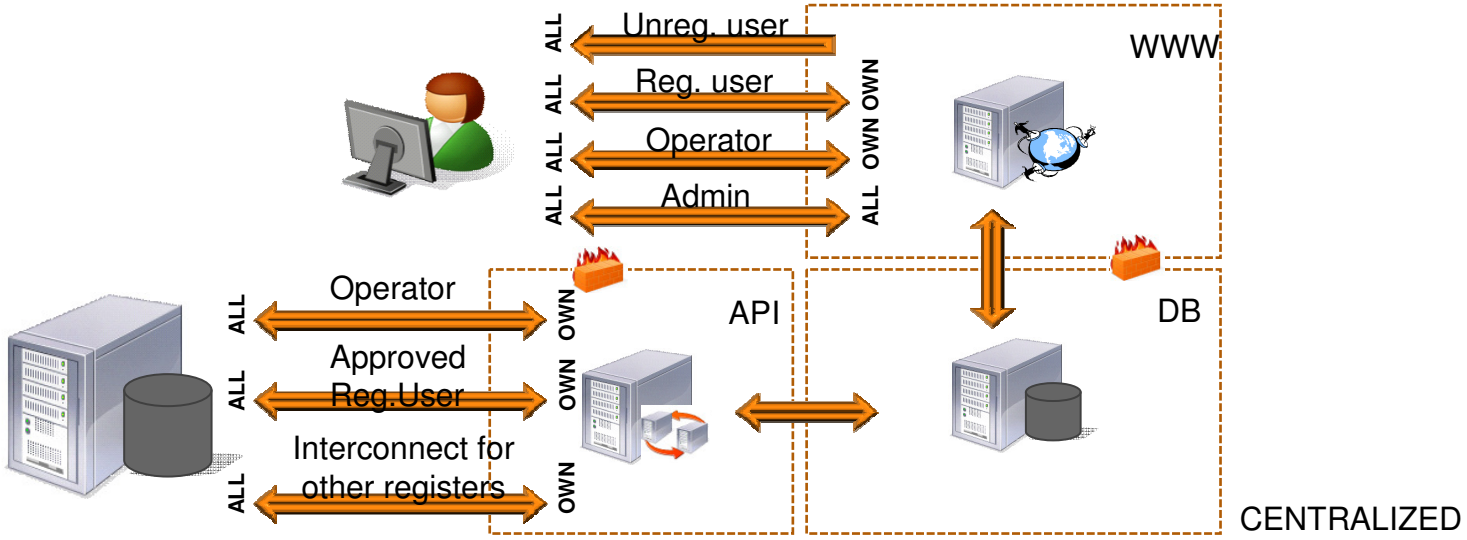
www interface

- Different user rights:
  - Anonymous users: read (only) all information
  - Registered users (operators customers): read all information, right to update their own company and contact information
  - Operators: read all information, right to create and update their own customer information
  - Admin: Full rights



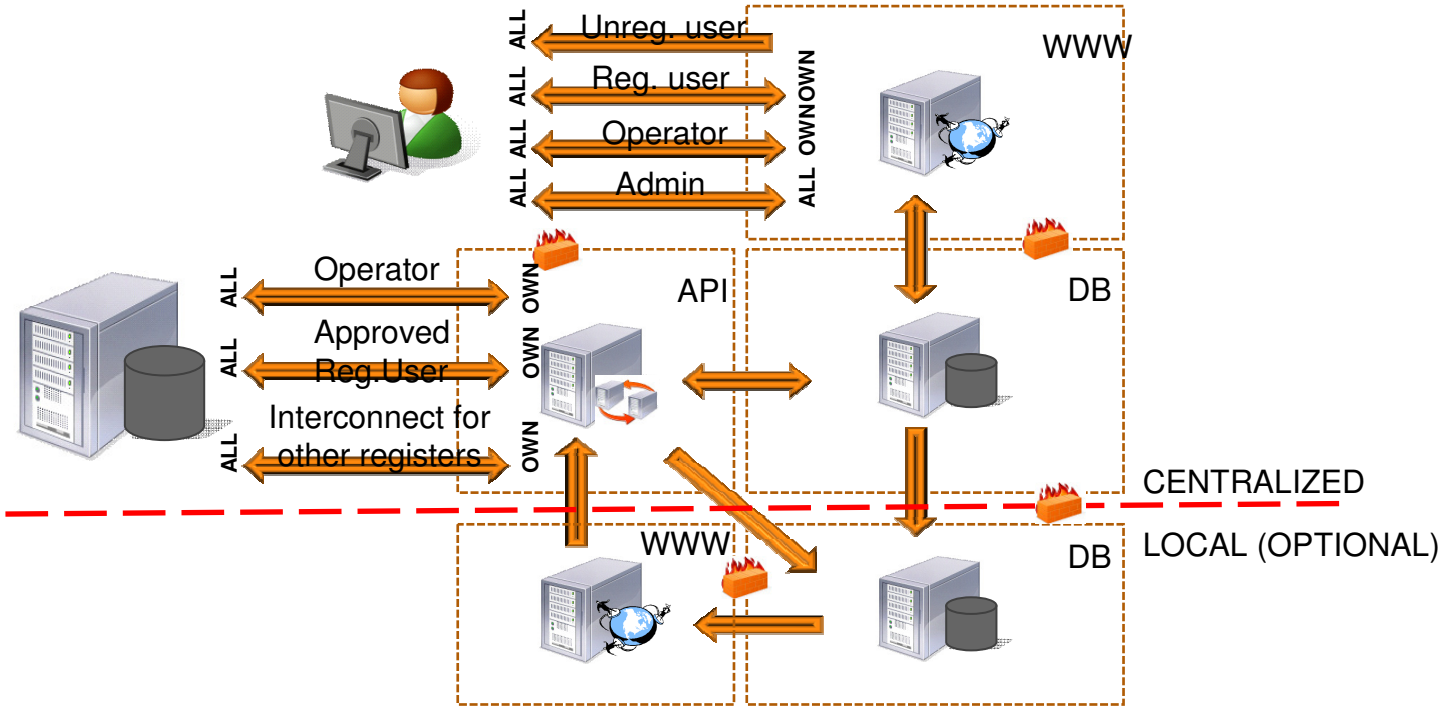
Application interface

- For operators to “mass” create and update their customer information, and for making automated queries from the database
- For other registers to “mass” create and update their customer information



Local database

- For operators to be integrated into their “channelling devices” in production, and for value added services: automated pairing etc



Sources

[1] CEN, prCWA XXX-1, 2009-06-15

[2] CEN, version 1.8, 2009-05-20

[3] eGREEN PAGES, Technical Architecture, 2008-11-15

[4] Asimelec, Manual de usuario de la guía efactura, Ref. PAV-080200-2007-62

PEPPOL Service Metadata Interface

1. PO is exchanged out of band (e.g. by email). Part of the PO is a Global Location Number (GS1) and an requisition number.
2. PO is entered into suppliers ERP-system (including GLN and requisition no.)
3. Goods are delivered
4. Invoice is sent to service provider (or invoice is generated with service provider). Requisition no. from PO is part of the invoice. GLS is part of metadata supplied to service provider (could also be visible on invoice).
5. Service provider makes a lookup to public directory with GLN and retrieves information about the business processes supported by the buyer related to e-invoicing. (e.g. basic invoice only, full invoice with application response, full invoice with application response and reminder)
6. The service provider chooses the most advanced business process matched by both parties and retrieves routing information.
7. Invoice is exchanged to service provider of buyer.
8. Service provider delivers invoice to buyer.
9. Buyer checks requisition no. and matches with PO.
10. Buyer sends application response (business level acknowledgement).

Source: eMail Mikkel Hippe Brun to Expert Group, 16.6.09